

# **CUBIT Administrivia & Future Plans**

**Tim Tautges  
CUBIT User Workshop  
Sandia National Labs  
Jan. 21-22, 1997**

# Obtaining CUBIT



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- **Runs on HP (HPUX 9 & 10), Sun-Solaris, SGI (Irix 5.3 & 6.2)**
- **Already available at SNL at some locations:**
  - **Bldg 836 LAN of Enchantment (Contact: Tim Tautges, 9226)**
  - **Bldg 880 Valinor LAN (Contact: Darrell Thomas, 9231)**
  - **Bldg 880 Eng Sci LAN (Contact: Randy Lober, 9113)**
  - **Bldg 980 CS LAN (Contact: Andrew Salinger, 9221)**
- **Executables also available over Web; contact Tim Tautges for access**
- **Other documentation and reports available in:**

***<http://endo.sandia.gov/SEACAS/CUBIT/release>***

# CUBIT Release Schedule



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- **CUBIT is on a 6-month release schedule**
- **Each release set to expire ~ 2 months after next scheduled release, because of magnitude of change in the current code**
- **Last release: CUBIT Version 1.14, 12/22/96**
- **Current copies of CUBIT 1.14 set to expire 5/31/97**
- **Next release: CUBIT Version 2.0, April 97**

# Future Plans Algorithms



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- **Whisker weaving: general 3D all-hex meshing**
- **Surface & volume hex dicing: dices coarse hex mesh into fine hex mesh, resolving geometry**
- **Hex-tet plastering: 3D hex-dominant meshing**
- **Multi-sweep: many to many surface sweep**

# Future Plans Coordination Tools



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- **General auto volume scheme select**
- **Feature-based decomposition**
- **Virtual geometry-based shrink-wrap & decomposition**
- **Auto mesh size selection**

# Future Plans Robustness & Usability



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- **Reduced memory usage**
- **Graphics: increased speed & decreased memory usage**
- **Improved geometry & mesh entity parsing**
- **Web-based bug reporting**

# CUBIT User Support



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- **We intend to provide CUBIT as a tool for (National Lab) production-quality mesh generation**
- **As such, we will provide user support for fixing bugs, with (hopefully) a reasonable response time**
- **Web-based problem reporting is on its way, will send message out when available**